

Abstract:

An optical switch includes support devices to create bends in the flexible optical fibers. In accordance with the invention, the support devices may be fabricated to include one or more microelectromechanical system (MEMS) devices. The support devices may also be fabricated as a support plate connected to one or more MEMS devices. A MEMS device includes a pair of actuators, such as electrostatic actuators, to create a bend in a flexible optical fiber. Selectively actuating or rotating the support devices creates bends in the optical fibers, which direct a beam of light from an input optical fiber to a corresponding output optical fiber. The bends in the fibers provide maximum coupling of the light into an output fiber.